

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions of claims in the application:

LISTING OF CLAIMS:

1. (PREVIOUSLY PRESENTED) A method for making a spin valve comprising:
providing a substrate;
depositing a first ferromagnetic layer having a first surface on the substrate;
depositing a spacer layer having a second surface;
depositing a second ferromagnetic layer, wherein the spacer layer is disposed between the first and second ferromagnetic layers; and
exposing at least the first surface to an oxygen partial pressure, then decreasing the oxygen partial pressure before depositing a subsequent layer.
2. (PREVIOUSLY PRESENTED) A method for making a spin valve comprising:
providing a substrate;
depositing a first ferromagnetic layer having a first surface on the substrate;
depositing a spacer layer having a second surface;
depositing a second ferromagnetic layer, wherein the spacer layer is disposed between the first and second ferromagnetic layers; and
exposing one or more of the first and second surfaces to an oxygen partial pressure, then decreasing the oxygen partial pressure before depositing a subsequent layer,
wherein one or more of the first and second surfaces are exposed to an oxygen partial pressure of between about 1×10^{-7} Torr and about 5×10^{-5} Torr.
3. (ORIGINAL) The method of claim 2, wherein the oxygen partial pressure decreases below an oxygen partial pressure level used in exposing the first and second surfaces before the depositions of the spacer layer and the second ferromagnetic layer.

4. (ORIGINAL) The method of claim 3, wherein the first surface is exposed to the oxygen partial pressure before depositing the spacer layer.
5. (ORIGINAL) The method of claim 3, wherein the second surface is exposed to the oxygen partial pressure before depositing the second ferromagnetic layer.
6. (ORIGINAL) The method of claim 1, wherein an ion beam sputtering process is used for depositions of the first ferromagnetic, second ferromagnetic and spacer layers.
7. (ORIGINAL) The method of claim 1, wherein oxygen molecules are directed toward the substrate, and a substrate shutter is fully open for the first and second surfaces to be directly exposed to the oxygen.
8. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the oxygen partial pressure is decreased by stopping a flow of oxygen.
9. (PREVIOUSLY PRESENTED) A method for making a spin valve comprising:
 - providing a substrate;
 - depositing a first ferromagnetic layer having a first surface on the substrate;
 - exposing the first surface to an oxygen partial pressure, then decreasing the oxygen partial pressure before depositing a subsequent layer;
 - depositing a spacer layer above the first surface, the spacer layer having a second surface;
 - exposing the second surface to an oxygen partial pressure, then decreasing the oxygen partial pressure before depositing a subsequent layer; and
 - depositing a second ferromagnetic layer above the second surface, wherein the spacer layer is disposed between the first and second ferromagnetic layers.

10. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the oxygen partial pressure decreases below an oxygen partial pressure level used in exposing the first and second surfaces before the depositions of the spacer layer and the second ferromagnetic layer.
11. (PREVIOUSLY PRESENTED) The method of claim 2, wherein an ion beam sputtering process is used for depositions of the first ferromagnetic, second ferromagnetic and spacer layers.
12. (PREVIOUSLY PRESENTED) The method of claim 2, wherein oxygen molecules are directed toward the substrate, and a substrate shutter is fully open for the first and second surfaces to be directly exposed to the oxygen.
13. (NEW) The method of claim 1, wherein the spacer layer is deposited prior to significant oxidation of the first ferromagnetic layer.
14. (NEW) The method of claim 2, wherein the spacer layer is deposited prior to significant oxidation of the first ferromagnetic layer.
15. (NEW) The method of claim 9, wherein the spacer layer is deposited prior to significant oxidation of the first ferromagnetic layer, wherein the second ferromagnetic layer is deposited prior to significant oxidation of the spacer layer.